

SAVE THE CHILDREN/US

HAITI FIELD OFFICE

FINAL EVALUATION REPORT

Grant Number OTR-0284-A-00-8254-00

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GLOSSARY

ARI	Acute Respiratory Infection
DIP	Detailed Implementation Plan
EPI	Expanded Program for Immunization
HIS	Health Information System
MOH	Ministry of Health
VAD	Vitamin A Deficiency
ORT	Oral Rehydration Therapy
LQAS	Lot Quality Assurance Survey
PVO	Private Voluntary Organization
SC/SCF	Save the Children
AID	Agency for International Development
USD	United States Dollars
FDN	Nutrition Demonstration Workshop
HG	Home Garden
GM/P	Growth Monitoring/ Promotion
USAID	US Agency for International Development
VHW	Village Health Worker

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I. EXECUTIVE SUMMARY

A. Findings

1. Overall Project Performance

The Save the Children Haiti Vitamin A project has successfully assisted mothers in the Maissade area of Haiti in reducing the risk of VAD deficiency among their children. This was achieved through an innovative approach combining the following elements: a defined registered population with identification of high risk individuals; community-based distribution of Vitamin A capsules; promotion of home gardens with Vitamin A rich plants; training of mothers of malnourished children in appropriate feeding practices stressing the inclusion of Vitamin A-rich foods in the diet; creation of women's groups with a focus on income generation.

2. Specific project objectives

- a. SCF has developed a useful field method of assessing Vitamin A risk and to monitor Vitamin A consumption. More importantly, the intensive growth monitoring activities (94% of under fives have a growth monitoring card and 60% were weighed within the three months preceding the evaluation) suggest that the program has the means to identify children in malnutrition and to intervene on their behalf.
- b. The project carried out an informative baseline survey which documented significant findings pertaining to child health and nutrition. These findings were translated into "programmatic lessons" by SCF staff and the implications thus derived were used in program planning.
- c. Project achievements were based on a dual approach strategy which emphasized increased access to Vitamin A, as well as increased maternal knowledge of Vitamin A issues. Compared to baseline data, the percentage of children 6 months to 6 years who had received a Vitamin A capsule within the last four months increased by 130% (from 26% to 60%), and a significant number of home gardens containing Vitamin A rich food were begun. 56% of mothers had knowledge of at least one Vitamin A rich food, and practically all children with special risk of VAD (children with moderate or severe malnutrition) had received one Vitamin A capsule within the 6 months prior to project evaluation. However, in the general population, few mothers could explain accurately why Vitamin A was important and what problem a VAD child may have. Nevertheless, results of focus group interviews show that members of special women's groups and mothers who participated in "Foyers de demonstration Nutritionelle" (roving nutrition centers) understood for the most part the importance of Vitamin A and the consequences of Vitamin A deficiency.

d. The project demonstrated effective use of data for decision-making. The Health Information System is population-based, all families being registered. This allows for identification of both sectors, where coverage is low, and individual children, who do not use services. Coverage data are monitored on a routine basis and fed back to project staff (health agents and nutrition monitrices). Efforts to extend this feedback process to community groups have been successfully initiated.

e. The project has developed a systematic approach to combating childhood malnutrition which involves comprehensive growth monitoring and the use of Nutrition "FOYERS" to rehabilitate malnourished children and teach mothers proper child feeding practices. While the Foyers were shown to be of benefit to approximately two-thirds of children attending them, carrying out the number of foyers needed to cover the entire population and impact on the problem of malnutrition would mobilize a level of resources which had not been planned for. Therefore, the overall nutritional status of children under five project wide did not seem to have progressed over the life of the project.

f. The project was successful in integrating the Vitamin A programs into other child survival activities. However, the project did not have a sufficiently explicit objective pertaining to project sustainability.

g. The groundwork for sustainability has been laid down with the increased knowledge of mothers with regard to Vitamin A rich food. Were SCF to cease all activities in the Maissade area, some degree of maternal knowledge of the importance of Vitamin A would remain as well as an increased understanding by mothers of inexpensive ways of incorporating Vitamin A rich foods into the family diet. The task of making Vitamin A capsules available to all children would fall back to the existing MOH personnel in Maissade.

II. RECOMMENDATIONS

A. Assess causes of low Vitamin A coverage in specific sectors and take appropriate corrective measures. The population-based sector specific data is valid (as confirmed by an on the spot LQAS survey) and is a powerful tool to identify poor performance by health workers. The HIS does not provide information on the reasons for such performance and additional data gathering is required for this purpose.

B. In view of the need to cover the entire population of malnourished children, it seems advisable to re-assess the home garden strategy to ensure that all families benefit from appropriate technical assistance in this regard. Better indicators are needed to assess progress in this area (i.e. to determine whether the pace of garden development is adequate to cover the entire population at a reasonable interval).

Home gardening is a key activity for the project. It reduces the vulnerability to food shortages during the dry season, increases food amount in the household, increases the

economic power of the family and the community, and provides a significant source of vitamin A rich food for the children. The project should continue to improve home gardens through training of household members, and increased accessibility to good seeds, and fertilizers. Market studies could be a way to examine the economic value of home garden production, and identify means to increase this value. This should be carefully approached, however, because by increasing the value of the home garden's fruits and vegetables, the tendency to allow the children to eat the produce will be reduced. The same idea of working on a marketing strategy should be applied to the drying mango initiative.

C. There is a need to be more accurate and specific when conducting training. All focus groups including the VHWS were confusing vegetables and fruits with high, low or no vitamin A- content foods.

D. The process of establishing and nurturing women's groups needs to be strengthened by stressing empowerment issues as well as specific nutrition issues. Child survival themes may be used in the process of empowerment and mobilization of women.

E. The nutrition foyer strategy needs to be thoroughly reviewed through staff strategic sessions to assess future approaches which should address expected coverage against staffing requirements and required resources.

F. It would be advisable to simplify the health information system by reducing the number of forms which appear to be excessive and by initiating a pregnancy and birth register in order to identify all newborns and assess pregnancy outcome.

G. Steps should be initiated to involve mothers more in the process of participation, which implies the capacity to deliberate, to evaluate information, to select options, to follow through on their application, to assess results , in a context where all actors have divergent interests to reconcile.

H. The initiation of careful marketing studies should precede the implementation of income generation activities such as drying mangoes, to avoid an insufficient demand for the product.

I. Staff expansion has not been commensurate with the availability of additional working space. Staff working conditions in Maissade could be improved by avoiding crowding.

J. The Maissade project has acquired extensive experience in the various facets of a Vitamin A program . Some of this experience should be shared with other PVOS to avoid reinventing the wheel or repeating mistakes. This could be achieved through a lessons-learned workshop highlighting the experience of the Maissade project, particularly its home garden facet.

III. EVALUATION REPORT

A. Background Information

The project *"Integration of Vitamin A Activities into Child Survival Programs"* was proposed by Save The Children to address the issue of Vitamin A deficiency in the Maissade area of the Central Plateau of Haiti. The amount granted by AID was USD 536,247.00 and the target population was 45,000 persons. Field activities began in December 1988. A no-cost extension prolonged the PACD to September 1993 .

The Detailed Implementation Plan highlights two major project objectives:

- a. increase access to Vitamin A
- b. increase maternal knowledge re Vitamin A and appropriate child feeding practices in general.

The project sought to reach the first objective by establishing an extensive capsule distribution program and by encouraging households to initiate home gardens containing Vitamin-A rich plants.

Efforts to increase maternal knowledge about Vitamin A took many forms including:

- a. development of women's groups which were a channel to convey information to mothers, the information being conveyed by "animatrices" who were a type of community organizers whose efforts however were more in the realm of education rather than organization;
- b. talks given by health agents at rally posts, places of assembly where mothers and children gather to receive a set of services provided by health agents and auxiliary nurses, including growth monitoring, immunization , Vitamin A distribution, pre-natal care, etc.;
- c. Nutrition "Foyers". Children identified through growth monitoring as being moderately or severely malnourished were invited to attend a nutrition center set in the village for a two-week period. Two roving nutrition aides were responsible during the two weeks for showing mothers the most economical ways to feed their children adequately and in fact bought locally available food for that purpose. The Foyer thus had a dual rehabilitation and educational function. Two days (out of 10) were reserved for discussion of Vitamin A. One month after the Foyer ended, target mothers were visited by health agents and the children weighed. This follow-up process showed that 65 % of children attending the Foyers in the last six months of the project had gained weight while the remainder had not or had in fact lost weight.

B. Methodology

Project accomplishments were assessed via three approaches:

- a. A review of available service statistics obtained through the population-based health information system;
- b. A Lot Quality Assurance Survey using households selected at random at the time of the evaluation;
- c. Focus group interviews of members of women's groups and mothers who had taken part in a nutrition foyer and interviews with SCF staff members.

The detailed methods are described in the appendices.

C. Results

Capsule distribution was effective in reaching a significant proportion of children in the general population and close to 100% of children suffering from moderate and severe malnutrition. This was evidenced by a review of service statistics which showed that 60 % of children 6 months to 6 years had received a capsule during a four-month period. This figure translates the fact that most sectors attended by a health agent had high coverage levels which were counterbalanced by a few sectors with unacceptable levels. The same results were confirmed by a Lot Quality Assurance Survey (LQAS) which documented a 62% coverage rate for the 4 months immediately preceding the evaluation and 3 sectors out of 10 surveyed with low coverage levels.

The Home Garden approach got off to a false start as the project sought at first to promote seeds and plants imported from outside the Maissade area. A preliminary review of results led to a change in strategy which emphasized the recognition of Vitamin A rich plants that could be found in existing home gardens around Maissade. Some of these plants, such as leaves, had little market value but were rich in Vitamin A and required little input for their cultivation. The task of project staff was to encourage mothers to incorporate these plants into the daily diet and to protect the plants from being eaten by goats and other domesticated animals. At the time of project evaluation, this new strategy was still in a development phase and no benchmark indicators were available to assess progress.

Mango solar-drying activities with women's groups in Maissade were funded by VITAL/ISTI and initiated in 1991 as part of the effort to increase the availability of Vitamin A-rich foods throughout the year.

Nutrition aides at the Foyer made a special report of all children who had not received the appropriate Vitamin A capsule dose prior to attending the Foyer.

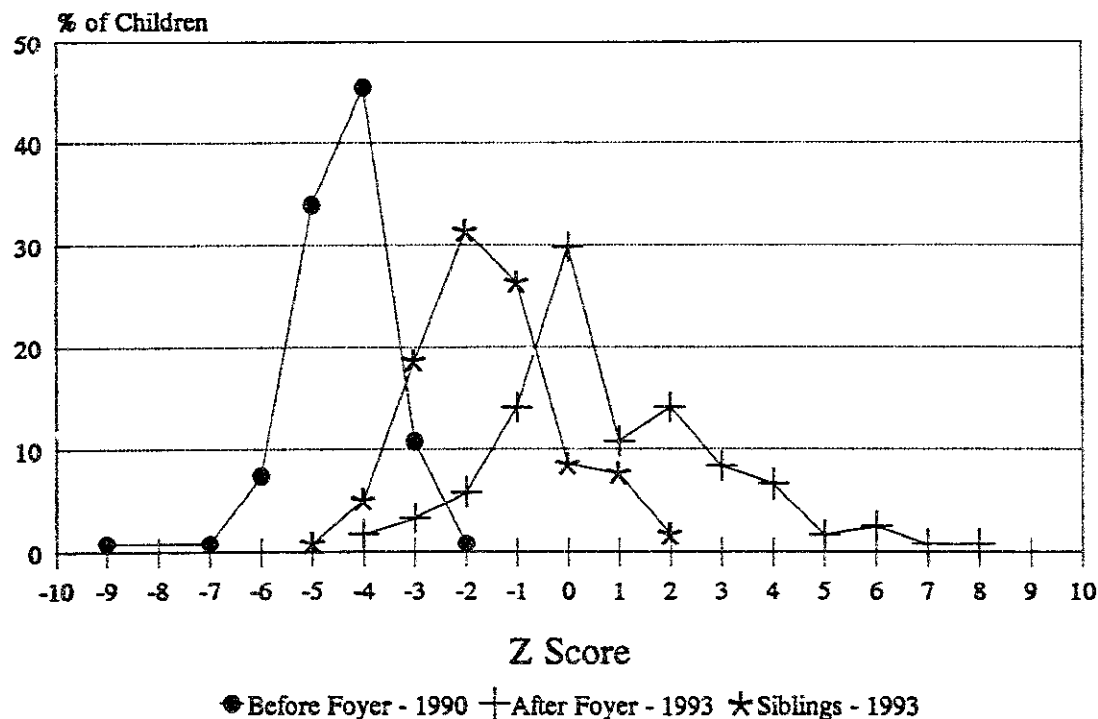
Unsupplemented children received a capsule while in attendance at the Foyer. In the last 6 months of the project, no child was found requiring special supplementation .

The baseline survey (1991) had shown the following distribution of children by nutritional status (Gomez classification):

Gomez Classification	Percentage of Children
Normal	30%
Mild malnutrition (M1)	46%
Moderate malnutrition (M2)	21%
Severe malnutrition (M3)	3%

Thus, 24% of the children of Maissade (1685 out of 7021 in 1993) were candidates for "Foyers". There were only 20 Foyers per year attended on the average by 15 children each. Each year, only 300 children could thus attend and it would require more than 5 years to cover all children, not counting new birth cohorts.

Distribution of Z Scores of All Children Who Attended the Foyer During 1993



Despite the seeming effectiveness of individual foyers (see graph), not enough foyers were held to cover needy mothers and children, and 35 % of children did not benefit from their passage in a Foyer. Data from the baseline survey compared to service statistics and the results of the LQAS did not document a change in the nutritional status of children:

Nutritional status of children under five in Maissade.

Nutritional Status (Gomez Classification)	Percentage of Children		
	Baseline (1991)	Service (1993)	LQAS (1993)
Normal	30	34	23
Mild malnutrition	46	40	48
Moderate malnutrition	20	23	25
Severe malnutrition	3	3	4

Results of focus group interviews of mothers who had graduated from a Foyer show significant levels of comprehension of the importance of Vitamin A, the source of Vitamin A rich foods, and the consequences of Vitamin A deficiency.

In view of the severe resource constraints under which these households operate, the particular situation of the Haitian economy between October 1991 and September 1993, and the short period of time involved (two years between surveys), it is not too surprising that the project could not document an overall impact in the reduction of the prevalence of malnutrition.

D. Factors Affecting Project Implementation

1. Political Instability.

The period of October 1991 to September 1993 has been characterized by political instability, a deterioration of the Haitian economy leading to an inflation rate of 40% for 1992, and a decline in personal income (12% in 1992). SCF was requested by USAID to suspend all project activities in October of 1991 and the order was not rescinded officially until January of 1993.

2. *Difficult Logistics.*

During that same period, roads deteriorated considerably, particularly the road linking Port-au-Prince to Maissade, leading to heavy costs in vehicle maintenance and difficulty in maintaining a timely supply schedule for the Maissade program.

3. *Availability of Commodities.*

The economic sanctions initiated by the Organization of American States led to a trade embargo which made it difficult for a while to obtain fuel, vaccines, Vitamin A capsules etc. However, by April 1992, most of these commodities had become available.

4. *Expert Technical Assistance.*

The project received an extensive amount of technical assistance from various consultants knowledgeable in Vitamin A issues. Furthermore, the project benefited from a mid-term evaluation of the Mission-funded child survival project which led to several pertinent recommendations for improvement which were followed by the staff.

IV. LESSONS LEARNED

A. Importance of a defined population and a good health information system

The population-based approach to health service delivery ensures equity by identifying all members of a given population requiring services. No-shows and non-participants are known by name and the reasons for their lack of participation can be explored. Valid denominators can be used for service statistics and sector (health worker) specific data can be generated. Poor performers may thus benefit from the appropriate level of supervision.

This type of health information system may easily become cumbersome, with information being collected which is of no use for decision-making. Constant efforts must therefore be made to avoid redundancy and the collection of data for its own sake.

B. Home gardens

Rural households grow humble plants which have little commercial value but may contribute to improving the nutrition of household members. Giving value to these plants and teaching mothers their proper use is a low cost way of improving household diet. While this notion is attractive, the experience of the Maissade project shows that it is not so easy to implement. Barriers include access to water for irrigation (some of these plants are not available six months out the year), animals which consume the plant (goats), inadequate cooking and meal preparation

practices, and lack of interest in the plants because of their low economic value (they cannot be sold).

C. Foyer follow-up

Follow-up steps to a Foyer (the health worker visits the mother to assess how much she retained of what she was taught and weighs the child to see if he has gained weight) could be extended to any intervention, the purpose of which is behavior change. Such a competency-based approach to training allows for quick evaluation of program effectiveness and permits the identification of barriers or opportunity costs which may prevent mothers from putting the lessons into practice.

D. Raising the socio-economic level of the entire community

Programs with the objective of improving the lives of the poorest of the poor seem to work best when designed to allow general improvement in the well-being of all community members.

E. LQAS

LQAS is a simple and effective tool to measure performance, once a threshold of acceptance is defined.

V. EVALUATION TEAM

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VI. PROJECT SUSTAINABILITY (AID QUESTIONNAIRE)

A. Sustainability Status

1. PACD.

AID funding for this child survival grant ends on September 30, 1993.

2. Cessation of Child Survival Activities.

Currently, funding for child survival activities is assured through September 30, 1994 with funding from the USAID Mission. Save the Children's current program in Haiti has funding from several sources through September 30, 1996 and child survival funding will be sought to extend activities through that period.

3. Phasing of control.

Chronic political instability and the presence of a de facto government since the military coup in September 1991 has made formal partnerships with government services extremely difficult. No national NGOs are headquartered in the Maissade Commune; however through other funding, Save the Children has established partnerships with 10 NGOs in the Central Plateau for AIDS prevention. Emphasis has been placed on collaboration with grassroots organizations in Maissade and to date 100 women's clubs, 103 peasant groups, 90 trained traditional birth attendants and 4 health committees work with Save the Children on health and other issues (literacy, credit, agriculture). Save the Children has focused on behavior change (traditional home gardens, consumption of Vitamin A rich foods, nutrition education and demonstration foyers) and in the next three years will place great emphasis on a structured program to involve community groups in social mobilization and information system use. Already, the urban women's club involved in solar mango drying performed training of 49 outlying women's club delegates in the techniques as well as 6 women from a neighboring local NGO, ODEKA.

B. Estimated Recurrent Costs and Projected Revenues

1. Effective activities

The key child survival activities that project management perceives as most effective and would like to see sustained are promotion of traditional home gardens (jaden lakou); distribution of Vitamin A capsules; growth monitoring. Nutrition education and demonstration foyers have to be further evaluated and modified to show better impact for funds invested before continuing.

2. Recurrent costs

Expenditures for key child survival activities to continue for at least three years after child survival funding ends include:

\$39,188 USD for promotion of traditional home gardens (including 25% of an agriculture coordinator's salary, 3 agriculture extensionists, fringe benefits and motorcycle and mule maintenance).

\$41,657 USD for health rally posts for the distribution of Vitamin A and growth monitoring. Costs include the salaries of 4 auxiliary nurses, 4 MOH health agents, fringe benefits and travel (mule maintenance).

\$19,343 USD for nutrition foyers including costs of 3 nutrition monitrice salaries, fringe benefits, training costs for 20 foyers per year and travel (mule maintenance).

3. Total amount needed

The total amount of money in US dollars the project calculates will be needed each year to sustain the minimum of project benefits for three years after CS funding ends is approximately \$35,000 USD.

4. Cost per beneficiary

This works out to a cost per beneficiary of .77 USD per year.

5. Projected revenues

Ministry of Health human resources in Maissade include two auxiliary nurses, one medical doctor and four health agents who could perform Vitamin A distribution and growth monitoring. Vitamin A capsules are available through the Ministry of Health. Other activities involve behavior change within families themselves and do not need to be funded (traditional home gardens and education gained through nutrition demonstration and education foyers).

6. Unsustainable costs

Costs not likely to be sustainable include recurrent funding for personnel such as agriculture extensionists, nutrition monitrices, an M.D. with experience in public health, and the costs of foyers.

7. Lessons learned

Based on the estimated number of moderately and severely malnourished children in Haiti, it is estimated, based on project "FOYER" costs, that USD 5.5 million would be required per year to enroll mothers and malnourished children in FOYERS nationwide.

On the other hand, the promotion of home gardens with Vitamin A rich foods appears to be an inexpensive approach requiring few additional resources beyond those currently available.

C. Sustainability Plan

1. Project staff interviewed

The following persons were interviewed:

.Country co-directors	Jean Marie Adrian Valerie Stetson
.Field program officer	Eric Swedberg
.Health coordinator	Dr. Ludzen Sylvestre
.Agriculture coordinator	Agr. Edouard Demetrius
.Education Coordinator	Suze Exume
.Supervisor of "Animatrices" (in charge of women's groups)	Rita Jean Joseph
.Monitrice	Micheline Garcon
.Assistant health agents and auxiliary nurses	

From the mid-term evaluation report, it was noted that most personnel did not know very much about goals and objectives of the project, baseline survey results and recommendations and were not involved in policy making nor operational decisions. Since then, however, a significant effort has been made to involve staff members at various levels in various facets of project implementation, particularly in the realms of program interventions and monitoring and evaluation.

2. Project's Plan for Sustainability

The project's plan for sustainability as laid out in the DIP is a strategy based on community participation and involvement. Community-based assistant health agents are chosen by the community to be trained by SCF and in turn train families in child protective behaviors. This training takes place in women's clubs, in household visits, during health rally posts and nutrition demonstration foyers. Training of women's groups transfers skills to community members and increases program sustainability.

Collaboration with the Ministry of Health at various levels in reviewing project objectives, strategies and activities took place. Project staff coordinate with MOH personnel at the district level and in Maissade, the MOH provides building space and health personnel to work with project staff. Host-country national personnel manage and operate the project.

3. Sustainability-promoting activities

Over the lifetime of this project the sustainability-promoting activities which were actually carried out include:

- organization and training of nearly 100 women's clubs with about 1500 members (Vitamin A education, traditional home gardens training, papaya seedling nurseries, mango drying).

- work with existing 103 groupement (organized peasant groups) (traditional home gardens, fruit tree nurseries)
- organization of 4 health committees to manage mini- health centers medicines and supplies (including Vitamin A)
- support of an urban women's club "Fanm Decidee" who are now managing a mango and food drying workshop.
- implementation of health rally posts (751 from 10/89 - 6/93)
- implementation of nutrition education and demonstration foyers (70 from 1988-93).
- involvement of Ministry of Health personnel in mid-term evaluation and final evaluation.

4. Sustainability Plan Implementation

The key efforts made in the DIP's sustainability plan centered on the promotion of home gardens and the acquisition by mothers of knowledge pertaining to Vitamin A. Both efforts were successful but were limited in their success by the number (a minority) of households covered.

5. Financial commitment of counterpart institutions

Financial commitment by counterpart institutions made during the design of the project to sustain project benefits include ProVAX, a private non-profit project of Eye Care Inc. ProVax was responsible for Vitamin A capsule supply and Vitamin A training and provided technical support to the project over the life of the grant (Vitamin A capsule supply and staff training).

6. Reasons for keeping commitment

The success of the counterpart institution to keep their commitment (ProVAX providing capsules and training) is due to ProVax's mandate as a national institution for Vitamin A supplies and technical assistance.

D. Monitoring and Evaluation of sustainability

1. Indicators the project has used to track achievements in sustainability outputs and outcomes include:

- # of functioning women's clubs (meet monthly)
- # of functioning "groupements"
- # of health rally posts held
- # of foyers held
- # of women's clubs trained in mango drying
- # of women trained in traditional home gardens

2. Accomplishments

The accomplishments in sustainability shown by the indicators are as follows:

As of May 1993, 95 women's clubs are functioning of which 57 clubs with 825 members have received training in Vitamin A; traditional household gardens and papaya nurseries.

As per a study of community groups conducted in February 1993:

103 peasant groupements are active.

751 health rally posts were carried out from 10/89 - 6/93.

70 foyers were held.

49 women's club delegates were trained in mango solar drying and received portable dryers.

In October 1992 an evaluation for a Mission-funded child survival program showed that 85% of respondents belonging to women's clubs correctly answered questions on Vitamin A.

3. Change in sustainability potential

The focus group discussions revealed that the potential to sustain some of the project activities is high. Women now know that vitamin A capsules, vitamin A rich food, and dried mango can save their children from Vitamin A deficiency. They also valued weighing, and taking the child to a health center or a rally post.

If the project ends, the women stated that they will continue with drying mangos and other vegetables, eat vitamin A rich food, and take care of the home garden. The women who attended "Foyers" mentioned that knowledge acquired by the project will continue to be applied. Lack of resources, however, is more important than lack of knowledge when it comes to providing more food for the child to eat. Save the Children is addressing this issue through its home gardening, and income generation activities

4. Cooperating in-country agencies

In-country agencies who worked with Save the Children on the design, implementation or analysis of the midterm evaluation and this final evaluation include:

Eye Care - ProVax

USAID

Ministry of Health Bureau of Nutrition

Ministry of Health District Office

Professional Management Service

5. Feedback on recommendations

Recommendations regarding sustainability on the project from technical reviewers of the proposal and DIP are not available. However, Laurine Brown, nutrition consultant to this project from August 1991 - December 1991 made 10 recommendations based on the findings from the Vitamin A baseline study carried out in 1990. Recommendations from her report regarding both sustainability and other issues include :

- a. Considering educational approaches to promote appropriate weaning practices and delay introduction of supplemental foods. The cultural reality that many mothers must work outside the home and leave the children in the care of others must be considered.

Actions taken: In 1991, the SCF Westport-based nutritionist worked closely with Maissade project staff to develop the nutrition education and foyer guide which has lessons and key messages on appropriate weaning practices. This was supplemented by a consultancy in September 1992 by Dr. Gretchen Berggren who worked with staff to identify "dry" weaning foods which mothers can leave with their children when they go to markets.

- b. Consider programs to improve access to safe water, latrine construction and/or hygiene education. Handwashing should be emphasized.

Actions taken: 18 polluted open springs have been capped and two small towns (Maissade and Mme Jwa) received technical assistance and materials to install water systems. An inventory of all water springs in the entire Commune was completed in 1992.

- c. Develop a strategy to improve accurate monitoring of immunization coverage and possibly to improve immunization coverage. Make sure a regular supply of cards is ensured, provide plastic covers and train families on the use and care of the cards.

Actions taken: on-site training of record-keepers and development of a coherent information system improved monitoring of immunization coverage. Evaluations of individual health agents against objectives made with HIS-generated reports since 1992 resulted in steady improvement of coverage (71 % coverage of children under five completely vaccinated compared to 25 % at the time of baseline data collection). An LQAS performed under the final evaluation showed that 94 % of mothers possessed a growth monitoring card for their child.

- d. Consider means to improve coverage for the second and third dose of tetanus.

Actions taken: according to project documents, nearly 60% of women 15-49 years of age have received two tetanus doses against 35 % at the time of the baseline data collection.

e. Determine the obstacles to use of family planning services and consider programs to reduce barriers. A major question is "who supplies and distributes contraceptives and how can the system be improved?".

Actions taken: contraceptive distribution was expanded in the Commune from one point (Maissade dispensary) to five points (dispensary plus 4 mini-health centers staffed by an auxiliary nurse). Staff training on surgical methods (Norplant etc.) available at an area hospital in Pignon took place in 1992. Family planning remains an area where improvements can be made. Starting in FY 94, a public health nurse will be responsible for improving contraceptive prevalence coverage.

f. Consider non-formal primary education programs for young girls and women.

Actions taken: in July 1993, a six-month literacy program began with about 1200 women participants (women belonging to women's clubs).

g. Information about malnutrition rates can be compared with rates of malnutrition after interventions.

Actions taken: malnutrition rates were measured during the final evaluation and compared to baseline levels (see above);

h. Determine barriers to understanding of growth cards by mothers. Are cards regularly supplied? Are plastic covers available? Are caretakers trained in understanding growth cards. What can be done to improve the quality of the services provided at the rally post centers?

Actions taken: staff received training in improving services at health rally posts through organization of stations and increasing services offered (deworming medicine, "beignets" made with green leaves distributed to children). A health trainer with extensive experience in growth monitoring counseling was hired in January 1993 and retrained all staff involved in growth monitoring.

i. Increase Vitamin A capsule coverage. Children over 24 months should be targeted for capsule distribution.

Actions taken: see section A for coverage in Vitamin A capsule distribution.

j. After further validating the tool for risk index for dietary vitamin A deficiency, it should be administered again at the end of the program (and in the same season, Jan/Feb) to determine possible program impact on improving the vitamin A content of children's diets.

Actions taken: with the assistance of VITAL/ISTI, SCF finalized a simplified version of the risk index for dietary vitamin A deficiency. Surveys were implemented and data tabulated in September 1992, December 1992 and September 1993. Analysis of the data is ongoing to determine the programmatic implications of data gathered.

6. Recommendations regarding sustainability

Recommendations regarding sustainability of the midterm evaluation team centered on community awareness and education (sensitize, inform and train community

leaders, women's club and groupement leaders on the role of Vitamin A, the consequence of its deficiency, the signs and symptoms of xerophthalmia, prevention and treatment of VAD and use of Vitamin A rich foods). The MTE team also placed great emphasis on redefining the strategy of gardening to focus on women's clubs and Vitamin A rich vegetables.

The project carried out recommendations especially on training of organized community groups and also developed a new strategy for vegetable gardens emphasizing improvements on traditional home gardens as a low-cost investment.

E. Community Participation

1. Leaders and community members interviewed

The final evaluation team interviewed women club members as representative of their communities. Three groups were organized and interviewed using the focus group discussions methodology.

2. Effective child survival activities

Drying fruit and vegetables and home gardens were the two most important activities of the project according to the women club members. Women who attended the nutrition workshop ("Foyers") categorized weighing as an important project activity. They also stated other project's efforts such as the distribution of vitamin A capsules, and the establishment of the mini-health centers as important activities that meet current health needs of the community. Women who attended the nutrition workshops valued weighing, and taking the child to a health center or a rally post.

3. Activities carried out to meet the community's basic needs

The activities carried out by Save the Children to enable the communities to better meet their basic needs and increase their ability to sustain effective child survival project activities include training of women's club delegates in solar drying technology and distribution of home solar dryers; improvement of traditional home gardens through training of farmers in live fencing, provision of live fencing seedlings unavailable in Maissade, training of women through foyers and women's clubs in nutrition education and demonstration.

4. Community participation in project design and implementation

While there appears to have been little community participation in the initial design of the project, efforts were subsequently made to obtain increased community involvement: creation of health committees to supervise mini-centers, participation in the design of home gardens and development of women's groups which encouraged a process of empowerment which will eventually lead to improved capacity to identify needs, to select options and to monitor implementation.

5. Health committees

There are currently four functioning health committees in the Maissade Commune to assist in the integration of auxiliary nurses in their communities and management of mini-health centers where cold-chain equipment and supplies for health rally posts are stored. During the past six months all committees met on a monthly basis, although in one section additional meetings were held to resolve a dispute over the location of the auxiliary nurse within the community. Committee members include traditional leaders and representatives of organized groups.

6. Issues addressed by health committees

The most significant issues currently being addressed by these health committees center on the management and disbursement of funds generated from the sale of medicine from the mini-health center.

7. Resources contributed by the community

The project provided limited resources to promote the implementation of its activities. Most of the seeds and fertilizers needed by the home gardens were provided by the families. This will encourage the continuation of this activity. The cost of the nutrition education workshops is very small (\$80 U.S.). This will encourage community members to carry it out on their own. Vitamin A capsule distribution could continue through the MOH structure.

8. Resource contribution

There will be a tendency for more success for women groups contribution to continue project activities. The groups are made of community women who have a drive to improve their lives as well as the lives of their neighbors. The project taught them income generation activities that will secure their income. Skills and knowledge that they acquired by the project will permit them to prioritize community needs in an orderly fashion.

F. Ability and Willingness of Counterpart Institutions to Sustain Activities

1. Persons interviewed

Two MOH Public Health Nurses were interviewed, one in charge of programming for the entire province, the other in charge of overseeing all health activities in several counties of which Maissade was one.

The two nurses complained of the limited resources at their disposal but were open to joint activities between PVOS in general, SCF in particular, and the Ministry of Health.

2. Linkages

The Maissade Health Project is conducted under the overall supervision of the MOH provincial office in nearby Hinche. The province (Department) has a population in excess of 500,000 persons and several PVOs beside SCF work there.

In recent months, steps have been taken to create a consortium of health agencies working in the province and several child survival activities have already been funded including a special program to reinforce vaccination coverage. Financial assistance to the consortium was provided by PAHO.

3. Key local institutions

The key local institutions are consortium members, with assistance from the MOH and PAHO.

4. Activities perceived as effective by the MOH

Nutrition activities, in particular growth monitoring and "FOYERS".

5. Skills building

There was some limited activity in training the local MOH personnel staffing the Maissade township clinic in child survival activities related to Vitamin A and nutrition. In addition, health agents employed by the MOH received additional training to allow them to supervise project-paid assistant health agents.

In addition, the project integrated four MOH personnel into the program; an auxiliary nurse and four health agents. These personnel participated in all technical training throughout the life of the project and especially assist in health rally post organization and service delivery.

6. Current capabilities to sustain activities

Steps have been taken (see above re consortium) to reinforce the capacity of the MOH to play a more active role in this area. However, a national debate has begun to redefine the role of the MOH with regard to service delivery, norms, training, supervision etc. Once the outcome of the debate is known, it will be appropriate to plan for future responsibilities regarding the continuation of child survival activities.

7. Activities perceived as effective by counterpart organizations

Some organizations have sent their staff to Maissade for field observation (health rally posts) and training in mango solar drying.

G. Project Expenditures

1. Pipeline analysis

The pipeline analysis is attached in the appendix .

2. Budget versus expenditures

The only category of expenditure which was much lower than originally planned was the headquarters personnel line. This was due in part to the fact that the nutritionist originally hired left before the grant ended and timing did not allow rehiring of a full-time nutritionist. These funds were then made available for the

Field Office to hire consultants; some of whom could not come to Haiti because the political situation did not allow concurrence from the local USAID mission.

3. Handling of finances

An internal audit performed in May 1993 noted that much improvement was made compared to the 1991 audit which showed many weaknesses. The new co-directors were noted to have "made a remarkable job in following-up on recommendations made and implementing most of them". The evaluation team reviewed project expenses against the budget and did not discover any unusual discrepancy worth noting and, on the basis of the audit, and overall project performance, has concluded that the project handled the finances in a competent manner.

4. Lessons learned

A review of project expenditures showed that personnel costs were key to the project activities as opposed to project supplies needed. This was because many of the activities involved training to use locally-available resources for child feeding or traditional home garden improvements. Another lesson learned for this particular grant which developed innovative strategies (foyers, traditional household gardens) was that an initial input into costs of senior project manager staff, in this case the field office director or a program manager, was important to the program.

H. Attempts to Increase Efficiency

1 and 2. Strategies to reduce costs and their impact

In 1991 efforts were made to make the project more efficient, reduce costs and increase productivity by integrating vertical activities into the overall community development program in Maissade.

The original project funded a separate bookkeeper/secretary, vehicle, record keeper and vegetable garden supervisor. Staff were housed in a separate building from other agriculture staff. In addition 3 ophthalmologic aids were hired for specific Vitamin A interventions at health rally posts.

Based on the recommendations of the 1991 mid-term evaluation, the administrative functions were consolidated into one administrative team which covered all grants including Vitamin A and staff were reduced from 4 to 3. The posts of record keeper and vegetable garden supervisor were eliminated. Integration of the Vitamin A-rich food consumption component into the activities of the well-trained agriculture staff greatly increased output and quality of programming. Vitamin A distribution was integrated into the activities already performed by the assistant health agents. Ophthalmologic aids were retrained as record keepers to assist in the health information system unit and computerization of HIS information.

Funding of a consultant for the health information system for nearly a year resulted in the development of a system to evaluate individual performance against

objectives. Children's and women's rosters with service coverage statistics were tabulated monthly by the field staff. Results were presented graphically on a monthly basis to the entire staff and results of poor and excellent performance analyzed and used to resolve problems. Individual results permitted the project coordinator to direct close supervision to those who most needed it. Examples of the results on coverage statistics are illustrated by the doubling of the percentage of children under 5 weighed in a previous quarter (35% in July 1992 to xx% in July 1993). In addition, 10710 Vitamin A capsules were distributed in FY 92 as opposed to 8648 in calendar year 1990.

3. Lessons learned in the area of efficiency.

The key lesson pertains to the integration of Vitamin A activities into other health and child survival activities.

I. Cost Recovery Attempts

1. Cost recovery mechanisms

The project focused on promoting local traditional practices (household gardens and behavior change expected to be supported by individuals and community groups.

2 and 3. Costs covered by revenues/inequities in services

Profits from income generation activities remained with the women's groups initiating these activities. At this time, the project is considering the sale of seeds and income from credit interest as ways to finance some project costs. Since the project does not charge for services, this aspect has had no impact on the PVO's reputation and on equity.

4. Success of household income generation activities

The success is primarily related to the organization and nurturing of women's groups through which support is provided to the household for income generation.

5. Lessons on cost recovery

This was not a major component of project activities.

J. Household Income Generation

1. Implementation of household income-generation activities

Household income generating activities were limited to the urban women's solar mango drying activity.

2. Amount of income

This income-generating activity resulted in net profit of 2417 gourdes (193 USD) by the urban women's club with approximately 50 members.

3. Use of revenues

Income generation was used by the women to purchase fruit and vegetables for drying and add to the drying materials which they own. The income generated was not used to meet the cost of health activities funded under this project.

4. Lessons learned

The project is now paying closer attention to management skills of the urban women's club through training by a local consultancy firm, CEFET. The lessons learned include the need to incorporate management training from the beginning into the project which concentrated solely on the technical capacity to dry fruit and vegetables.

K. Summary of project's sustainability

The principal accomplishments of the project with regard to sustainability are:

- 1) the establishment of a fund of knowledge among mothers concerning Vitamin A issues and child feeding practices in general. One important aspect of this achievement is the fact that a significant number of mothers of high risk children have been reached, either through "Foyers" or through women's groups;
- 2) the project has also given to mothers the means to put some of the knowledge into practice by showing them how to use the lowly leaves they can find in their backyards which happen to be rich in Vitamin A.

In more general terms, the project has strengthened maternal knowledge pertaining to child feeding practices, primarily through its "Foyers".

While project personnel has shown competence in carrying out its sustainability-promoting activities, the main limitation is that not enough resources were planned to reach all those who needed to be reached. This was particularly the case for the "Foyers" which would have required more personnel and resources to reach all children suffering from malnutrition and their mothers.

With regard to the home garden activities, the project has not explicitly developed milestone criteria to assess progress so that it is difficult to assess how many households are in fact aware of the advantages that they can get out of their home gardens.

Nevertheless, the project's experience in home gardening is full of lessons which need to be shared with other PVOs and perhaps expanded to other kinds of food groups, not just Vitamin A rich foods.

There are some remaining questions which deserve further study: who are the 35% of children who do not benefit from "Foyers" and why don't they? . How can the process of empowerment of women be linked more specifically to child survival

issues? What is the balance between economic support activities (such as credit) and technical interventions such as vaccination, Vitamin A capsule distribution etc.

Finally, despite a difficult political context, the project has managed to participate actively in a long-term process of improved coordination and sharing with other organizations working in the health area in the Central Plateau. The newly created **CENTRAL PLATEAU CONSORTIUM** will be a powerful tool for improved programming and increased sharing of resources.

APPENDICES

**Haiti - Vitamin A Project
Final Evaluation
September - 1993**

APPENDIX A

FOCUS GROUPS

i. BACKGROUND**a. Women Clubs**

Save the Children in Maissade fostered the organization of community women into "Women's Clubs". SC "Animatrices" provide the club with the necessary support to develop their organizational structure, mandate, and annual plan. The goal of the club is to improve the quality of life for its members through literacy, health, agriculture, and a credit program.

b. Nutrition Education Workshops

Women identified during the project's growth monitoring activities as having a child with second or third degree malnutrition are invited to attend a nutrition education and demonstration workshop. The objectives of the workshop are to provide the child with an opportunity to catch up on his/her growth, and educate the mother on how to prepare low cost nutritional meals for her family. The group is engaged in a 15 day process through which an intensive nutrition education and rehabilitation program is carried out. Food is cooked during the foyer and fed to the children. Mothers learn how to improve the qualities and the quantities of their children's diet.

c. Village Health Workers

At the beginning of the project, each village was asked to identify a person that could be trained as a health worker. A set of criteria was developed by the project to be used as a guide in the identification of these individuals. SC trained those people on projects' interventions and is currently providing them with a stipend. Their responsibilities includes animation and promotion of project activities within the village, conducting home visits, and maintaining the village based roster, the key instrument for the project's HIS.

ii. METHODOLOGY

Six homogeneous focus groups were formed; three organized of women's clubs members, two of mothers who attended the nutrition demonstration workshops (FDN), and one of village health workers. Each group consisted of 7-9 persons. One interviewer and one recorder were assigned to each group.

A questionnaire was developed for each group category (Appendix A) by the evaluation team. The contents of each questionnaire were based on a list of indicators derived from the project's DIP (Appendix C). The interviews were conducted by members of the evaluation team and project staff in the corresponding sites of women's meeting.

Project staff helped in the organization and execution of this task. The following is the schedule of the interviews:

Category	Date	Time	Site
Women's Club	Sept 8, 93	10:00 a.m.	Benjamene
Women's Club	Sept 8, 93	10:00 a.m.	Larik
Women's Club	Sept 8, 93	3:00 p.m.	Maissade
Foyer's Women	Sept 8, 93	11:00 a.m.	Fon Pican
Foyer's Women	Sept 8, 93	12:00 p.m.	Bastrack Mapou
VHWs	Sept 9, 93	10:00 a.m.	Maissade

The following were the guidelines to follow before posing the questions:

- . Thank the group for accepting to come and meet with the team.
- . Introduce each members, and ask each person to introduce herself/himself
- . Explain to the group the reason for the discussions
- . Inform the group that they are NOT required to answer every question
- . Make sure that each question asked is open ended

The questions were asked in Creole and the answers translated into English after the end of the interview.

iii. ANALYSIS

a. Members of Women Clubs and Women who attended the nutrition education workshops

Home Gardens: A key activity designed by SC to increase the household supplies of food in general, and vitamin A rich food in particular. All interviewed women stated they had a home garden. They consider it to be the women's garden. It is irrigated by waste water. It provides a source of food during the dry season. A large number of vegetables are planted in the HG. For a list, please refer to appendix b.

Some seeds and fertilizers are provided by the project. The majority of the seeds, however, come either from the previous season's plants, or from the market. A small glass full of Lalo seeds cost 2 gourds (17 cents - US). The harvest is used for home consumption, income generation, and replanting. Most women sell a portion of their production on the local market. The amount consumed versus the amount sold was difficult to assess.

Vitamin A Deficiency: Respondents were successfully able to describe vitamin A deficiency as an eye problem. Many recognized signs and symptoms such as dried (unclear) eye, spots on the eye, and nocturnal blindness. Most called the condition "Chicken's eye". Some women stated skin and hair dryness. Most women were able to describe how they could diagnose VAD if their children were affected. Few confused visual acuity with vitamin A deficiency. One group of women who attended the nutrition workshops were not able to distinguish VAD from malnutrition. Despite their knowledge of vitamin A rich food, the same group was not able to specify how to protect a child against VAD.

All women groups stated that VAD is preventable and treatable by providing vitamin A capsules, and vitamin A rich food to their children, when affected. Few women would take the child to the health center or the rally post. When listing Vitamin A rich food, women were adding items that have no or very little content of vitamin A (tomatoes, oranges, melon). Some stated non vegetable sources of vitamin A such as colostrum, milk, meat, and egg yolks. One group discussed the value and the cost of animal source of vitamin A. To increase a child intake of vitamin A, all women stated vitamin A rich food and vitamin A capsules.

Dried Mango: This activity pioneered by the project is designed to increase the availability of vitamin A rich food in the community, and increase the economic power of those women who are engaged in its production. Except for one group formed of the women who attended the nutrition workshops, all other women groups stated that dried mango is a good snack for the children. All women club's group were able to accurately described how they produce dried mango. In addition to consumption, dried mango is a good source of income for the women. One focus group mentioned that a child can eat a 10 gourdes (83 cents - US) worth of dried mango in one sitting. Four out of 5 groups stated that dried mango is good for the children because of its high content of vitamin A. All groups listed accurately other vitamin A rich food.

Growth Monitoring/Promotion: Growth Monitoring was perceived by all groups as a means by which the mother can know whether her child is sick, not growing, and in need of vitamins. The women were able to associate the growth monitoring card to progress in the child's development. Some mothers stated that when you go to the dispensary without the card, you do not get served. In addition to consulting with the dispensary about their child illness, the women said that providing the child with milk, extra food, and vitamins will treat malnutrition.

Concerning the groups of women who attended the nutrition education workshops, one of the two groups knew that they were selected because their children did not weigh enough. Both groups were able to list the activities conducted during the workshops. Some of them mentioned few health messages. One of the two groups

described the value of the card, and its use to identify malnutrition. Both groups were able to describe correct measures in case a child is malnourished.

Other project activities: Women Club members said that vitamin A capsules, vitamin A rich food, and dried mango can save their children from Vitamin A deficiency. They also stated other project's efforts such as promoting home gardens, and establishment of the mini health centers. Women who attended the nutrition workshops valued weighing, and taking the child to a health center or a rally post.

Women said that other activities that the project should consider include giving more seeds and technical advice for home gardens, establishing water sources, health centers, roads, and markets. If the project ends, the women stated that they will continue with drying mangos and other vegetables, eat vitamin A rich food, and take care of the home garden. The workshops' women mentioned that knowledge acquired by the project will continue to be applied. Drying fruit and vegetables and home gardens were the two most important activities of the project, according to the women club members. Women who attended the nutrition workshop categorized weighing as an important project activities. Lack of resources is more important than lack of knowledge when it comes to providing more food for the child to eat.

b. Village Health Workers

Vitamin A Deficiency: Knowledge of VHWs about vitamin A deficiency were high. They described correctly the reasons why Vitamin A is important to health. They made the connection between malnutrition and VAD, and the use of vitamin A capsules for the prevention and treatment of its deficiency. They correctly stated the dosage for Vitamin A capsules, and listed a large number of vitamin A rich food. However, they included in the list those yellow and orange fruits with low or no vitamin A value.

Mango drying: Although VHWs did know the high Vitamin A content of dried mango, they did not have knowledge about how to dry them.

Nutrition Education Workshop: VHWs said that women liked the workshops and that the mothers were interested in knowing. They always asked when the workshops would be held again. VHWs described that when the mothers observed their children gaining weight, they had a greater tendency to give more food to the other children in their homes. VHWs explained the content of the workshops, how the women were selected, and the key messages that they promoted among the participants. Weighings of children occurred during household visits, health rally posts, and in mini-centers, on the road, at the market, etc. The nutrition education

workshops were also used to teach mothers about ORT, use of the road to health card, and family planning.

Example of a health message: When the mother is going to the market, she can add leaves in her little beignets. This way when she return to her house, she can add the leaves to the meal she is planning to cook.

Health Information System: VHWs explained the project's HIS in details. At the end of each month, they gave the vital events reports (births, deaths, departures, arrivals) to the auxiliaries. If there is missing information, the auxiliary will talk to the VHWs about it. VHWs stated that they need raincoats to protect their papers when they carry them from one place to another.

Outline used for Discussions by each group category**Group I: Women Clubs Members**

1. What is a Home Garden?
 - a. Do you have a home garden?
 - b. What type of food do you grow in your home garden?
 - c. Where do you get the seeds, and the fertilizers?
 - d. What do you do when you harvest the vegetables?
2. What is Vitamin A deficiency (VAD)?
 - a. What are the symptoms and signs of VAD?
 - b. What would you do if a child has VAD?
 - c. How you can protect your child against VAD?
 - d. Describe a recipes that has a Vitamin A rich food?
3. What is dried Mango?
 - a. How could you produce dried mango?
 - b. What do you do with the dried mango you produce?
 - c. Why dried mango is good for your child?
 - d. What other Vitamin A rich food do you consume, and how often?
4. Why weighing the child is important?
 - a. What is a growth monitoring card?
 - b. By looking at the card, how do you know that your child is not eating enough
 - c. What would you do if a child is malnourished?
5. What did you learn from the project?
 - a. What are the project activities that enabled you to protect your child against VAD
 - b. What other things the project should do?
 - c. How are you planning to continue to protect your child against VAD after the project ends?

Group II: Mothers attended the Nutrition Demonstration Foyers

1. What is a Home Garden?
 - a. Do you have a home garden?
 - b. What type of food do you grow in your home garden?
 - c. Where do you get the seeds, and the fertilizers?
 - d. What do you do when you harvest the vegetables?
2. What is Vitamin A deficiency (VAD)?
 - a. What are the symptoms and signs of VAD?
 - b. What would you do if a child has VAD?
 - c. How you can protect your child against VAD?
 - d. Describe a recipes that has a Vitamin A rich food?
3. What is dried Mango?
 - a. Why dried mango is good for your child?
 - b. What other Vitamin A rich food do you consume, and how often?
4. Why weighing the child is important?
 - a. How were you selected to attend a FDN?
 - b. What did you learn during the FDN?
 - c. What is a growth monitoring card?
 - d. By looking at the card, how do you know that your child is not eating enough
 - e. What would you do if a child is malnourished?
5. What did you learn from the project?
 - a. What are the project activities that enabled you to protect your child against VAD?
 - b. What other things the project should do?
 - c. How are you planning to continue to protect your child against VAD after the project ends?

Group III: Village Health Workers

1. Vitamin A Deficiency (VAD)
 - a. Why Vitamin A is an important for health?
 - b. What are the symptoms and signs of VAD?
 - c. Where the population can find competent care
 - d. Describe prophylactic/therapeutic dose of VAC
 - e. What are the different form of vitamin A rich food
 - f. Explain the message you provide to the mother about the right amount of VA rich food they need to consume every day
 - g. Describe the vitamin A capsule distribution strategy
 - h. What are the high risk group that we should provide with extra dose of vitamin A capsule
2. Vitamin A Rich Food
 - a. Explain how you can produce dry mango, how the product is marketed
 - b. What are other vitamin A rich food available on the market
3. Nutrition Education Workshops
 - a. What is the impact and perception of services by beneficiaries (Women who participated in the FDN)
 - b. How the project can adjust its strategy in the future for micronutrient programming
 - c. How many recipes you developed/distributed for adding vitamin rich food to children diet
 - d. What strategy do you use to communicate the health education messages to the mothers (home visits, rally post, FDN, etc.)
 - e. What are the Knowledge and skills acquired by the mothers during the FDN
 - f. How the mothers for the FDN are selected
4. Health Information system
 - a. How do you use the information you collect
 - b. Is their other information you believe you need to better do your work.

Indicators used to develop the outline of the focus group discussions

The following are the key indicators for developing the focus group discussions questionnaire. All are derived from the detailed implementation plan.

Vitamin A Deficiency

1. Knowledge of the benefit of vitamin A intake
2. Knowledge of symptoms and signs of vitamin A deficiency and how to seek competent care
3. Administration of prophylactic/therapeutic dose to those reported as having the S&S of VAD
4. Different form of Vitamin A intake,
5. Frequency of consumption of vitamin A rich food
6. Knowledge and skills about the production and use of dried mango
7. Knowledge of the vitamin A rich food
8. What is the impact and perception of services by beneficiaries (Women who participated in the foyer
9. What is the appropriate strategies in the future for micronutrient programming development of culturally acceptable recipes
10. Mothers to be trained in the use of vegetable in children diets
11. How do they receive the health education messages, home visits, rally post, FDN, etc....

Home Gardens

1. Knowledge of setting and using Home gardens in order to increase consumption of vitamin A rich food,
2. Content of the home gardens,
3. Consumption vs. sale
4. Consumption of vitamin A rich food
5. Availability of vitamin A rich food in the market
6. Financial value of home gardening
7. Financial value of drying mangos
8. Frequency of consumption of vitamin A rich food
9. How do you access seeds, fertilizers, community nursery, seeds beds, etc...
10. How often do you consume vitamin A rich food
11. Where mothers trained in drying mango

Growth Monitoring and malnutrition

1. How to access services in case of malnutrition
2. The value of the growth monitoring card
3. Knowledge and skills acquired during the FDN
4. Dissemination of information during the foyer

5. What did they learned during the foyer, how to feed a malnourished/growth faltering child
6. VHWs has to interpret a growth curve to plan interventions, knows how to conduct a GM/P session, GM/P at each rally post
7. How the mothers for the FDN are selected - it has to be mothers of malnourished children
8. Impact of FDN on the improvement of the child nutritional status, and his/her younger sibling.

Health Information system

1. Is information used in decision making
2. How information is collected, can you get it, is it the right information is it a good information

Sustainability (see section E)

1. What will be sustainable by the end of the project
2. How major project responsibilities and control been phased over to local institutions
3. What activities are perceived by community leaders, women, members, as most effective at meeting current health needs
4. What activities did the project carry out to enable the communities to better meet their basic needs and increase their ability to sustain effective child survival project activities
5. How the communities participated in the design, the implementation and evaluation of the child survival activities
6. What are the number of functioning health committees, how often do they meet during the last six months, what are the most significant issues addressed by these committees
7. What resources, the communities contributed to the project describe success/failure of the continuation of these contributions

Increase Efficiency

1. What strategies did the project implement to reduce costs, increase productivity, or make the project more efficient.
2. Did the Monitrice/VHW monitored the consumption of food among preschool children, and assess the use of VA rich food in their diet.
3. Description of vitamin A distribution strategy by VHWs, dosage, treatment of cases, value for diarrhea, measles, and ARI etc.
4. Training of monitrice in the preparation of a foyer
5. VHWs will receive refresher training

APPENDIX B

HEALTH INFORMATION SYSTEM ANALYSIS (HIS)

INTRODUCTION

The purpose of this study was to analyze the different instruments and methods used to collect information, to organize it in a coherent manner, and to channel it, through different levels, from the field to the central office; to assess the capability of the system to tackle problems; to show objective achievement and evaluate field worker performance and to determine how information was used for decision making. This was done in the context of the Final Evaluation of the Save the Children Vitamin A project in Maissade.

MATERIALS AND METHODS**Instruments**

The project's health information system (HIS) uses twenty six (26) instruments: four remain in the household, six are used by the community - based primary health care workers called Aide Agent de Santé (AAS), three by the community-based Auxiliary nurse, twelve are managed by the record keepers in the Maissade Office, one is maintained by the project coordinator (see Appendix I).

The house card, the women's immunization card, the child's road to health card and a yellow card for supervision are found at the household level.

Health agents use the women's' registration roster, the roster of under five children , two migration reports (arrivals, departures), the birth report form, and the death report form.

Auxiliary nurses keep three forms . In the office are the following forms: five summary report forms on target groups, one rally post form, one population control form, one monthly supervisors' report , three report forms on nutrition education, the family enrollment form and the technical report form.

The entire population is censused and registered on family registration forms kept at the office. The total area is divided into four (4) zones and each zone is furthermore subdivided into 21 sectors .

The rosters are lists of target groups (children 0 - 5 years and women aged 15 - 49 years) taken from the family enrollment forms. They contain information on immunization dates, vitamin A doses, weights of children, and the dates they were weighed.

METHODS

Aide Agent de Sante

At the Aide Agent de Santé level, forms concerning interventions are filled at the rally post while beneficiaries are receiving services. During house to house visits, additional information on education session carried out by the AAS are noted in the child's roster and women's roster and vital events information is updated.

Auxiliary Nurses

The AAS send the completed forms to the auxiliary nurse on a monthly basis. She then prepares a summary that she passes along to the coordinator who examines it and transfers it to the record keepers. The latter uses vital events forms to update the family enrollment form and enter all new data into the computer.

A summary of activities is prepared for each for each sector and sent back to the auxiliary nurse. A general summary is then prepared and sent to the project coordinator.

Project Coordinator

The coordinator receives a statistical report from the record keepers, adds a narrative part to complete it then sends it to the main office in Port-au-Prince.

FINDINGS

A review of service statistics as collected through this system shows the following:

TABLE I
VITAMIN A DISTRIBUTION COVERAGE
PLANNED ACHIEVED

Children 6 - 11 months	75%	57.9%
Children 12 - 72 months	50%	(combined)
Women within 30 days of delivery	75%	94.46%
Preschool children treated	100%	100% with any sign of VAD

**TABLE II
HOME GARDENS**

	Planned	Achieved
Family with home gardens	310	569
Fruit trees planted	20684	
Fencing	15209 meters	

**TABLE III
TRAINING**

	Planned	Achieved
Mothers trained in feeding practices	760	1890

**TABLE IV
NUTRITIONAL STATUS OF CHILDREN 0 - 59 MONTHS**

Number of children under five:	7,779
Total weighed in preceding 3 months :	5,239
% weighed	67.34 %

**TABLE V
AGE-SPECIFIC DISTRIBUTION OF NUTRITIONAL STATUS, GOMEZ
CLASSIFICATION**

Gomez Classification	Age Group (Months)				
	ALL	0-11	12-23	24-35	36-59
<i>Number (N)</i>	5240	1526	1318	1381	1015
Normal	35%	63%	27%	22%	19%
Mild malnutrition	40%	26%	47%	46%	43%
Moderate malnutrition	22%	10%	21%	28%	33%
Severe malnutrition	3%	1%	5%	4%	5%

TABLE VI
NUTRITIONAL STATUS OF CHILDREN UNDER FIVE
 Comparison of baseline versus service statistics
 (Gomez classification)

	Baseline	Final
Normal	30%	35%
Mild malnutrition	46%	40%
Moderate malnutrition	21%	22%
Severe malnutrition	3%	3%

CUMULATIVE NUMBER OF VITAMIN A CAPSULES DISTRIBUTED (LOP):
 38,581

TABLE VII
SOLAR MANGO DRYING ACTIVITIES

STATED OBJECTIVE	ACHIEVED
1) Establish a community-run commercial mango solar drying facility which will produce commercial quantities of dried mango by September 1992.	achieved
2) Expansion of solar mango drying techniques to families in outlying areas to stabilize the supply of mangoes throughout the year.	done
3) Train 20 staff members to recognize existing mixed gardens and promote agricultural practices to improve production of Vitamin-A rich indigenous vegetables.	done

CONCLUSION

Information collected at various levels is circulated and fed back from top to bottom. Simple graphics are used to explain to concept of coverage to health workers and to show them where they are in terms of their own sector. Action can be taken and follow measures adopted.

Vitamin A

In this specific area, objectives as stated were generally achieved. Data analysis shows that the project was successful in distributing capsules, encouraging the use of home grown Vitamin A rich food and producing dried mangoes.

Overall Nutritional Status

Significant barriers which are inked to the level of absolute poverty in the community and the deteriorating economic climate may partly explain why overall nutritional status of children has not changed significantly. However, the project did document that 65% of children who went through a "Foyer" were able to benefit from the experience.

INSTRUMENTS USED IN THE HEALTH INFORMATION SYSTEM

- I Kontwol Regis Ti Moun
- II Kontwol Regis Ti Moun pa an
- III Kontwol Regis Ti Moun pa mwa
- IV Regime AKTIVITE VITA pa mwa
- V Regime AKTIVITE VITA pa trimes
- VI Kontwol regis fanm
- VII Kontwol regis fanm pa mwa
- VIII Rapo sou moun ki vini
- IX Rapo sou moun Ki pati
- X Ranseyman sou fanm ki akouché ya
- XI Ranseyman sou moun ki mouri ya
- XII Pos Rasambleman
- XIII Rapport technique
- XIV Secteur
- XV Fich visit domisilyè
- XVI Fich swivi fwayé
- XVII Rapport mensuel de l'Agent de supervision de l'éducation pour la santé
- XVIII Fich teknik # 4
- XIX Dezyem vizit
- XX Regis Ti Moun anba 5 an
- XXI Regis Fanm 15 a 49 an
- XXII Regis menaj
- XXIII Chemen la santé
- XXIV Carte de vaccination femme
- XXV House Card
- XXVI Rapo Mansyel Mini Sant Santé

APPENDIX C

LQAS STUDY

1. Objectives

- a. assess the accuracy of the data obtained through the health information system;
- b. identify low performance sectors with regard to Vitamin A capsule coverage;
- c. assess overall project coverage in terms of the following indicators:
 - proportion of children 6 months to 6 years having received a capsule of Vitamin A in the 4 months preceding the study;
 - proportion of children 6 months to 5 years with a growth monitoring card;
 - proportion of children 6 months to 5 years who were weighed within three months of the date of the survey;
 - proportion of mothers who can cite at least one Vitamin A rich food;
 - proportion of mothers who can explain the importance of Vitamin A in health;
 - proportion of mothers who can describe the signs of Vitamin A deficiency in children.

2. Materials and methods

a. Universe of the study

Children 6 months to 6 years living within the boundaries of the 22 health sectors covered by the Maissade Vitamin A project.

b. Calculation of sample size

The threshold proportion P1 was specified so that the rate of coverage of Vitamin A capsules was considered too low. P1 was fixed at 20%

The threshold proportion P2 was specified, a level of coverage considered satisfactory in view of the objectives fixed in the project's DIP.

$$P2 - P1 = 30$$

$n = 10$ and $d^* = 5$ when n is the number of children's record to be examined per sector and d^* the number of records were administration of a Vitamin A capsule was not registered (α error = 0.1 and β error = 0.2).

3. Results

Information was collected on 99 children distributed between 10 sectors. Of these children, 10 were not utilized because of errors in the recording of data; 1 child was under 6 months of age and one over 6 years and were eliminated from the study.

a. Rejected sectors

Three sectors (out of 10) were rejected because of a d^* value in excess of 5. Seven sectors were accepted. Thus, seven sectors out of 10 surveyed had an acceptable level of Vitamin A coverage.

b. Growth monitoring card

94% of children surveyed had a growth monitoring card.

c. Age group

Out of 87 children , 11 (12.7%) were between 6 months and 12 months old; 76 were 1 to 6 years old.

d. Sex

There were 45 girls and 42 boys (1.07/1)

e. Vitamin A coverage

55% (48 out of 87) children had received a Vitamin A capsule within 4 months of the study date.

f. Mothers' knowledge

Only 15% of mothers knew why a child should consume Vitamin A while 17% could explain the consequences of Vitamin A deficiency.

g. Comparison with service statistics

Service statistics showed that 57.9% of children had received a Vitamin A capsule in the past four months while the LQAS documented a coverage rate of 55%

LQAS accurately identified three sectors whose service statistics had a low Vitamin A coverage.

4. Discussion and conclusions

LQAS is a useful method for identifying low performance sectors. The study found that in the general population of mothers and caretakers, knowledge of Vitamin A issues is low. This is in contrast with the findings from focus group interviews where knowledge seems to be higher. Women who participated in focus groups were drawn from former "FOYERS" attendees and members of women's groups . These two groups have benefited from special education sessions concerning Vitamin A.

APPENDIX D

PIPELINE ANALYSIS

COOPERATIVE AGREEMENT OTR--0204--A--00--0254

HAITI VITAMIN A

21-Oct-93

BUDGET VS. ACTUALS FOR YEAR 5 AND TOTAL EXPENSES TO DATE VS. TOTAL GRANT AWARD

	EXPENSES YEAR 1	EXPENSES YEAR 2	EXPENSES YEAR 3	EXPENSES YEAR 4	YEAR 5: EXPENSES VS. PLANNED BUDGET **				LIFE OF GRANT: CUM EXPENSES VS. TOTAL GRANT *			
					EXPENSES 07/31/93	PLANNED BUDGET	BALANCE	% EXPENDED	CUMULATIVE ACTUALS	TOTAL PLANNED BUDGET	BALANCE	% SP'ENT
0750 HQ												
Personnel	2,551.00	44,740.93	37,122.17	13,400.54	65,003.50	120,777.00	64,794.12	46.4%	153,815.00	210,010.00	64,794.12	70.4%
Other					68.05	0.00	(68.05)		68.05	0.00	(68.05)	
7250 HAITI												
Personnel	19,767.50	44,077.70	29,403.07	30,380.97	24,004.97	27,500.00	3,444.00	87.5%	155,702.01	150,147.50	3,444.00	97.8%
Travel	1,002.00	2,040.70	1,501.70	15,001.00	1,733.00	1,250.50	(477.30)	130.0%	22,549.35	22,071.97	(477.30)	102.2%
Equipment	21,751.25	1,550.70	(503.70)	122.67	0.00	(0.00)			22,800.02	22,800.02	0.00	100.0%
Supplies	13.00	2.41	550.05	33.07	0.00	0.00	0.00	0.0%	607.73	607.73	0.00	100.0%
Other Direct Costs	4,300.00	19,214.03	12,370.20	3,230.00	64.70	(0.00)	(64.70)		39,200.04	39,135.00	(64.70)	100.2%
HNUTN					22,305.31	0.00	(22,305.31)		22,305.31	0.00	(22,305.31)	
Subtotal Haiti	40,901.34	67,502.82	43,270.53	57,985.27	48,250.00	26,700.24	(10,492.76)	107.0%	203,324.76	243,032.00	(10,492.76)	100.0%
Total Direct Costs	49,453.02	112,252.55	80,300.70	70,703.81	104,310.01	149,543.02	45,233.31	69.8%	417,208.00	402,442.00	45,233.31	90.2%
Indirect Costs	2,343.57	15,502.40	10,400.41	12,050.50	17,795.30	24,320.03	6,530.04	70.2%	67,274.30	73,005.00	6,530.04	91.2%
Total	51,796.59	127,845.04	90,805.11	82,850.31	122,105.00	173,863.05	51,763.05	70.2%	484,483.05	530,247.00	51,763.05	90.3%

* Final expenses for year 4; Year 5 through: 07/31/93
** Budget reflects approved increase in indirect costs (to 17.00%) per Amendment No. 2.
*** Year 5 no-cost extension approved by AID on 6/23/92 with Amendment No.

Balances from Year 4 included in Year 5

Year 1 = September 1, 1988 - August 31, 1989
Year 2 = September 1, 1989 - August 31, 1990
Year 3 = September 1, 1990 - August 31, 1991
Year 4 = September 1, 1991 - August 31, 1992
Year 5 = September 1, 1992 - September 30, 1993

No-cost extension approved 6/23/92

SAVE THE CHILDREN/US

**HAITI FIELD OFFICE
VITAMIN A TRAINING CURRICULUM AND
MESSAGES**

Grant Number OTR-0284-A-00-8254-00

**Save the Children
Wilton Road
Westport, CT 06880
203-221-4000**

October 1993

D) The Foyer

Day One: Learning about Growth Monitoring and the Causes of Malnutrition

Following the arrival and welcome of all the participants the monitrices:

- (i) review the goals and objectives of the Foyer
- (ii) explain the rules of the Foyer
- (iii) delegate responsibilities if necessary
- (iv) respond to concerns/questions of the participants

Discussion

- Each of the mothers has her child's Road to Health card. One of the monitrices shows the women a Road to Health card of a child with slower than normal growth and the monitrice asks the mothers to explain the line of growth. If they have difficulty doing that she can help them interpret it using the illustrative box at the bottom of the card (see Technical Paper #1)

- The monitrice discusses with the women possible causes of the child's slow growth: the child stopped breastfeeding too early; the child never breastfed at all; the child did not breastfeed enough or was only breastfed after 4 - 6 months when he should have had supplements; the child got diarrhea and the mother stopped feeding the baby until the diarrhea stopped or because he had no appetite etc...

KEY MESSAGE: FROM BIRTH TO AGE THREE, EVERY CHILD MUST BE WEIGHED EVERY MONTH. THE CHILD'S WEIGHT MUST INCREASE. IF IT REMAINS THE SAME OR DECREASES SOMETHING IS WRONG AND A SOLUTION MUST BE FOUND.

Supporting Messages:

1) Regular monthly weight gain is the most important sign of a child's overall health and development. It is the child's own weight gain which is important not how the child compares in weight to other children.

2) Breastfeeding alone helps protect a baby and ensure its growth for the first few months of life.

3) When other foods are given in addition to breastmilk at the age of three months, the risk of infection increases. From now on, it is especially important to check that a child is putting on weight every month.

Practical Activity - Weighing the Children

- One monitrice weighs the children and the other records the weight on the cards and asks the mother to interpret the line of growth. If the mothers cannot interpret the cards the monitrice takes all the time necessary to explain until they understand it. All the children are weighed. The link is made between this activity and the same activity done at Rally Posts with the hope that at future Rally Posts these children will show weight increase and improved health.

Food preparation

- One monitrice explains that every child should be breastfed from birth; up until 4 months breastmilk is enough to assure normal growth the child. After this age the breastmilk is not enough but the mother should not stop breastfeeding; on the contrary she should add food to the baby's diet which is more solid like Ak 1000.

- One monitrice explains how to prepare Ak 1000: good ingredients, utensils and method on mixing ingredients.

- One or two of the mothers prepare the Ak 1000. The role of the monitrices is to supervise the mothers - not to do the activity themselves. All the mothers must participate in this activity by joining in the discussion or by hands-on food preparation.

Food for the Children

- Two mothers are asked to serve the children. One monitrice supervizes the serving of the food without doing it herself. The other monitrice watches the children eating. It is necessary to ensure that all the children eat their food; if there is a problem, a solution must be found. When the food has been eaten, the monitrices supervise the washing of the dishes and their storage.

Day Two: Breastfeeding; Diet of Pregnant and Nursing Women

Discussion

- One monitrice asks a young mother how she has fed her baby since his birth. In the mother's response the following points are listened for: has she breastfed the baby since birth or was there a gap in time before breastfeeding began? Did she give the baby colostrum? If not what did she give in its place? "Lok"*, sugar water? How many times does she breastfeed the baby daily? Does she give the baby both breasts to nurse? For how long did she (or does she plan to) breastfeed without supplements of any kind? What kinds of changes (if any) are there in the diet of nursing or pregnant women?

*'Lok' a tea made by boiling orange tree leaves and adding nutmeg, oil, garlic and sugar which is believed to help a baby pass its first stool.

- KEY MESSAGES: 1) COLOSTRUM IS THE BEST LAXATIVE FOR A NEWBORN.
- 2) BREASTMILK ALONE IS THE BEST POSSIBLE FOOD AND DRINK FOR A BABY IN THE FIRST 4 MONTHS OF LIFE.

Supporting Messages:

- 1) Babies should start to breastfeed as soon as possible after birth
- 2) Even if the mother does not have breastmilk she should let the baby nurse
- 3) Frequent sucking is needed to produce enough breastmilk for the baby's need; breastfeed the baby at least every three to four hours and always when the baby wants to nurse.
- 4) The mother should breastfeed the baby for at least one year and for two years if possible.
- 5) All women need more food and drink during pregnancy and when breastfeeding.

Practical Activity: Balanced Diet

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Posters are displayed with pictures of pregnant and breastfeeding women. The monitrices display a variety of foods and discuss the role that each food plays in a person's health. Emphasis is placed on the need for a variety of foods in the diet and there is discussion about local foods available.

Food preparation

With the supervision of the monitrices the meal for the day is made by the mothers from the foods displayed in the practical activity.

Food for the Children

As on Day One

Day Three: Weaning Foods

Discussion

- One monitrice shows the women the line of growth of a child on an enlarged Road to Health card. This child has normal growth; every time he was weighed his weight had increased. Using this card the monitrice discusses a baby's diet after 4 months. She asks the mothers; how have they fed the children after this age? How often per day are the children fed? What supplements are babies given? When breastfeeding is stopped what do the children get to eat? etc

KEY MESSAGE: BY THE AGE OF FOUR MONTHS THE BABY NEEDS
OTHER FOODS. BEGIN TO SUPPLEMENT HIS DIET
WITH AN ENRICHED CEREAL. HOWEVER, DO NOT STOP
BREASTFEEDING THE BABY UNTIL ONE OR TWO YEARS
OF AGE OR LONGER.

Supporting Messages:

- 1) Children need to eat food at least 5 or 6 times per day
- 2) If a child has no appetite begin by giving him a little of his favorite food
- 3) Do not leave home without leaving food for the child
- 4) Do not leave the food for the other children to give him
- 5) The first supplementary food is an enriched cereal followed by mashed vegetables, fish, meat, eggs etc until gradually the child eats the family food.
- 6) All children need foods rich in Vitamin A.
- 7) Talking, playing and showing love are essential for a child's physical, mental and emotional growth.

Practical Activity: "Samsam"

- The monitrices talk about what defines an enriched cereal. The mothers are asked to explain how they prepare a cereal for their children. Often it is made with a wheat or

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The children are carefully watched as they eat the food. It is important that each child finish his portion. If the children don't like the taste of the food completely enough to eat it the flavor is adjusted so that they will eat it.

Food for the Children

A little butter, margarine or oil can be added while the porridge is cooking to make it richer. The porridge is cooled a little and then given by teaspoonful to the children.

The children are not yet ready to eat the dry "Samsam". A porridge has to be made for them: water is boiled and a spice eg cinnamon, orange peel or coconut etc is added. The Sam-Sam mixture is added and mixed until it resembles a thick liquid. As the Samsam is already cooked (fried) it only takes a few minutes for the porridge to be ready.

Food Preparation

The montitices demonstrate preparation of "Samsam". Two mantik* of maize are fried stirring well all the time. One mantik of peanuts is fried and cooled then put in a single layer on a large flat tray and shaken to remove the skins. The maize is pounded to a flour. The peanuts are pounded with the maize flour and less than half a mantik of sugar until all is well mixed. A little salt and other spices are added to taste.

- For an enriched cereal the ratio should be less than two portions grain to one portion beans or peanuts. To use less water and for shorter preparation time, the grain and beans - or peanuts - can be fried (without grease) for a short while. This way, the mixture can be ground, stored longer and prepared more easily.

corn flour, water and sugar and boiled until it resembles a thick paste. The montitices discuss with the women ways to increase the nutritional value of cereals commonly made in that locale.

Day Six: Vitamin A Deficiency: How to Prevent It and How to Treat It.

Discussion

Some questions for discussion:

What do the mothers know about Vitamin A? What is its role? Where is it found? What is the effect on a child's health if he doesn't receive enough Vitamin A? Are the mothers accustomed to hearing about night blindness? Is there a Creole word which describes night blindness? Are there any mothers who know how to treat these problems or how to prevent these problems?

The monitrice explains the three important roles of Vitamin A:

- i) it helps a person to have healthy eyes and vision
- ii) it is important for growth
- iii) it helps protect the body against such diseases as measles, respiratory infections and those which cause diarrhea

KEY MESSAGE: A CHILD WHO SUFFERS FROM NIGHT BLINDNESS OR HAS MEASLES, DIARRHEA OR SERIOUS MALNUTRITION MUST GO TO THE AHA OR DISPENSARY WITH HIS ROAD TO HEALTH CARD IMMEDIATELY.

Supporting messages:

1) To prevent Vitamin A deficiency in an area where this problem is present, children ages six months to six years should be given a Vitamin A capsule every four months. The AHA and Rally Post personnel distribute the Vitamin A capsules which are given orally. Each dose is recorded on the Road to Health card.

2) Nursing mothers should receive a Vitamin A capsule once during the first four weeks after birth. The Vitamin A will pass through the breastmilk to the child.

3) Breastmilk prevents Vitamin A deficiency in a child up to five or six months of age. After that age, a child must eat a Vitamin A rich food daily.

4) Vitamin A comes from breastmilk, dark green leafy vegetables and from orange or yellow fruits and vegetables such as carrots, papayas and mangos.

Practical activity: Calender with Vitamin A rich foods

1) The monitrices make a calender with the women depicting when Vitamin A rich foods can be found in the community

2) The monitrices discuss with the group what possibilities exist locally for producing these foods. The local animator may be invited to assist in the day's activities and serve as a resource person in relation to a discussion about family gardens.

3) The monitrices talk with the mothers about the meals that they are accustomed to making which contain Vitamin A rich foods

Food Preparation:

The women make rice or millet with a bean sauce and a vegetable sauce

The women are taught that the local custom of adding oil to the green leafy vegetables increases absorption of Vitamin A.

The precautions to be taken when vegetables and green leaves are being cooked are discussed: preferably they should be boiled but not for too long, they should not sit soaking in water for a long time and should be fried for a short time only.

Food for the Children:

Vegetables should be well mashed and mixed with rice or millet and then spoonfed to each child.

Day Seven: Vitamin A Deficiency: How to Prevent It and the
Solution for the Future

The monitrice reviews the material from Day Six related to the treatment of DVA and the prevention of DVA developing in a population which is at high risk for it. In reference to the Vitamin A capsule as the solution to DVA the monitrice asks: When must the capsules be given? to which people? Who distributes the capsules? Where is the dose of Vitamin A given recorded?

The monitrices discuss with the women advantages and disadvantages that they see or experience with this treatment. Advantages include its availability and simplicity of administration; disadvantages include its cost in expense and effort for both mother and health personnel.

The mothers are asked how the capsule could be replaced and discussion of Vitamin A rich foods ensues. The advantages of providing a Vitamin A rich diet are discussed

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KEY MESSAGE: ALL CHILDREN, PREGNANT AND NURSING WOMEN NEED
FOODS RICH IN VITAMIN A.

Supporting Messages:

1) Every family needs to have a family garden with
Vitamin A rich foods planted

2) Vitamin A may also protect against other foods such
as diarrhea. It should be part of every child's diet.

Practical Activity: Dried Mangos

Womens Club members who have experience in drying
foods especially mangos, are invited to come and make a
presentation about the drying technique. The mothers are
familiarized with ways to use the dried fruits and
vegetables year around to ensure a Vitamin A rich diet.

Food Preparation

In addition to the meal of the day (rice or millet
with bean sauce and vegetable sauce) special attention is
given to the preparation of a Vitamin A rich food eg. mango
juice is made using preserved mangos.

Food for the Children

As for Day Six.

Day Ten: General Revision, Final Weighing and Establishing a Plan

Discussion

Each mother is given a chance to name something new she learned during the Foyer that she had not known before it. Key messages and supporting messages are reviewed by the group. The women reinforce each other's learning with the help of the monitrices.

The mothers are asked to describe the effect the Foyer has had on their children eg. level of activity, appetite, emotions.

Note: In preparation for this day, monitrices can ask the mothers if they would like to invite visitors for the final day. This would allow the visitors to hear what has been learned during the Foyer, to see the progress of the children and to celebrate the completion of the Foyer by eating together. Possible invitees might be the participants of the first community meeting, friends who have children who could benefit from a Foyer or the spouses of participants.

Practical Activity

Each child is weighed and the weight recorded in the Road to Health card. The weight is compared with the weight recorded on the first day of the Foyer.

1) If the weight has increased: the mother is congratulated and encouraged to continue; the mother can show the group the child's line of growth and the group can discuss what has contributed to the changes in this child.

2) If the weight has decreased or if it has remained the same the mothers are invited to discuss the interpretation of the line of growth and the course of action needed for the child. The monitrice writes a referral for the the local AHA.

Food Preparation

As it is the final day of the Foyer plans are made for celebration. A balanced meal is prepared and if possible a meat is added to the menu.

Food for the Children

As on Day Eight